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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,358	07/23/2004	Ryoichi Otaki	Q82631	8111
23373	7590	05/25/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			PILKINGTON, JAMES	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/502,358

Applicant(s)

OTAKI ET AL.

Examiner

James Pilkington

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/23/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: Page 15 line 6 reads "Figure 16" should be - - Figure 26 - -

Appropriate correction is required.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: "...at inside" in line 2 should be - - inside- -. Appropriate correction is required.
4. Claim 4 is objected to because of the following informalities: "...at inside" in line 4 should be - - inside- - and "...ball crew shaft..." in line 6 should be - - ball screw shaft- -. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Clm 1 recites "An electric type actuator fixed to an outer face of a case containing a drive portion at inside thereof for driving a transmitting member projected from the outer face for driving the driven portion" lines 1-4. It is unclear to the examiner whether the driven portion is inside of the actuator or inside the case. Does the actuator or the case "contain" a drive portion? It is also unclear to the examiner as to what is driving the other (transmitting member and driven portion). On lines 2-3 it appears that the driven portion is driving the transmitting member, but in lines 3-4 it appears as the transmitting member is driving the driven portion. What is driving what? It is also unclear to the examiner as to what the radius of the electric motor is larger than. Is the applicant attempting to claim that the radius of the motor is larger than the distance from center of the output member to the case or the distance from the center of the transmitting member to the case?

8. Clm 3 recites "...an inclined face is formed with a portion of projecting the transmitting member and a portion of attaching a housing of the electric motor continuously to each other" lines 2-5. It is unclear to the examiner as to what the applicant is attempting to claim by the phrase "with a portion of projecting the transmitting member." What is projecting? A portion of what? Also what is the applicant attempting to claim by the phrase "a portion of attaching a housing of the electric motor continuously to each other." As written the claim appears grammatically incorrect. What is meant by the word "continuously", are they in constant contact? A portion of what is attaching a housing?

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9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 and 3, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Tury et al, USP 4,790,204.

Tury discloses an electric actuator (28) fixed to an outer face (20) of a case (16) containing a driven portion (26) inside thereof for driving a transmitting member (22) projected from the outer face (20) for driving the driven portion (26), the electric type actuator comprising:

- An electric motor (42)
- An output member (74 and 58 for the connection to the transmitting member 22) for transmitting a displacement based on rotation of the electric motor (42) to the transmitting member (22)
- A radius of the electric motor is larger than a distance from an axis center of the output member (74 and 58) disposed at an axis center portion of the transmitting member (22) to the outer face (20) of the case (16).

Re clm 3, the outer face (20) of the case is an inclined face formed with a portion of projecting the transmitting member (Figure 2) and a portion of attaching a housing of the electric motor (20a, 20b, 20c attach plate 32a) continuously to each other.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Tury et al '204 in view of Bansbach et al, GB 2338761 A.

Tury discloses all of the claimed subject matter as described above.

Tury does not disclose the outer face of the case provided with a recess portion and a portion of a housing of the electric motor is made to advance into the recess portion.

Bansbach teaches that the outer face of the case (60) can be provided with a recess portion and a portion of a housing (24) of the electric motor is made to advance into the recess portion (see Figure 3) for the purpose of providing a more compact transmission assembly to fit in smaller locations.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Tury and provide the outer face of the case with a recess portion and a portion of a housing of the electric motor is made to advance into the recess portion, as taught by Bansbach, for the purpose of providing a more compact transmission assembly to fit in smaller locations.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tury et al '204 in view of Laskey, USP 5,868,032.

Tury discloses all of the claimed subject matter disclosed above.

Tury does not disclose the actuator comprising:

- An actuator case
- A ball screw shaft
- A ball nut
- An inner peripheral face with a stopper

Laskey teaches an actuator case (17), a ball screw shaft (22), a ball nut (24) and an inner peripheral face (inside 17) with a stopper (70) for the purpose of providing a means to transmit linear motion (C1/L9).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Tury and provide an actuator case, a ball screw shaft, a ball nut and an inner peripheral face with a stopper for the purpose of providing a means to transmit linear motion.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

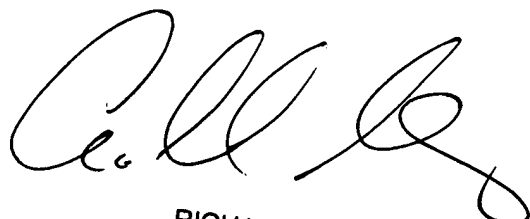
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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5/24/2006



RICHARD RIDLEY  
SUPERVISORY PATENT EXAMINER